

WHAT IS CLAIMED IS:

Pub A1  
1. A method for recovering from a failure of a computer system, comprising:

collecting state information of the system, the state information including hard disk state, registry state and at least one instruction for launching at least one restore program;

writing the state information to a medium in a defined format;

reading the state information from the medium and providing a restoration environment therefrom; and

launching the at least one restore program.

2. The method of claim 1 wherein collecting state information includes calling at least one API.

3. The method of claim 1 wherein collecting state information includes obtaining registry information via at least one API call.

4. The method of claim 1 wherein collecting state information includes obtaining hard disk geometry data via at least one API call.

5. The method of claim 1 wherein the defined format includes data stored as text.

6. The method of claim 1 wherein the defined format includes state information arranged into fields.

7. The method of claim 6 wherein one of the fields includes the instructions for launching the at least one restore program.

8. The method of claim 6 wherein one of the fields includes data identifying hard disks of the backed up system.

9. The method of claim 8 wherein one of the fields includes partitioning data of the hard disks.

10. The method of claim 8 wherein one of the fields includes volume data of the hard disks.

11. The method of claim 8 wherein one of the fields includes offset data of the hard disks.

12. The method of claim 1 wherein writing the state information includes saving information to a floppy disk.

13. The method of claim 1 wherein writing the state information includes saving information to a CD-ROM.

14. The method of claim 1 wherein writing the state information includes saving information to at least one network file.

15. The method of claim 1 wherein reading the state information includes receiving the state information over a transmission medium.

16. The method of claim 1 wherein providing a restoration environment includes copying operating system files to a hard disk.

17. The method of claim 1 wherein providing a restoration environment includes installing a device driver.

18. The method of claim 1 further comprising, determining a set of unchangeable files, and writing a catalog of that set to the medium.

19. A computer-readable medium having computer executable instructions for performing the method of claim 1.

20. A computer-readable medium having stored thereon a data structure, comprising:

a first set of data representing storage devices;

a second set of data representing partition information of the storage devices represented in the first set of data;

a third set of data representing volume information of the storage devices represented in the first set of data; and

a fourth set of data representing at least one command for restoring data to at least one storage device configured based on the information in the first, second and third sets of data.

21. The computer-readable medium having stored thereon the data structure of claim 20, wherein each set of data is separated into a distinct field from one another.

22. The computer-readable medium having stored thereon the data structure of claim 20, further comprising, a fifth set of data having version information therein.

23. The computer-readable medium having stored thereon the data structure of claim 20, further comprising, a fifth set of data having volume state information therein.

24. The computer-readable medium having stored thereon the data structure of claim 20, further comprising, a fifth set of data having removable media information therein.

25. A method for backing up a computer system for subsequent restoration, comprising:

collecting restore information, including hard disk configuration information, registry information, a catalog of unchangeable files and at least one instruction for launching at least one restore program; and

recording the restore information to at least one medium.

26. The method of claim 25 wherein collecting the restore information includes calling at least one API.

27. The method of claim 25 wherein the hard disk configuration information includes partition and volume information.

28. The method of claim 25 wherein the hard disk configuration information includes information indicative of where key operating system files are located.

29. The method of claim 28 wherein the information indicative of where key operating system files are located includes the location of a boot volume.

30. The method of claim 28 wherein the information indicative of where key operating system files are located includes the location of a system volume.

31. The method of claim 25 wherein the registry information includes data corresponding to hardware installed in the system.

32. The method of claim 31 wherein the data corresponding to hardware installed in the system includes device driver information.

33. A computer-readable medium having computer executable instructions for performing the method of claim 25.

Sub A3

34. A method for restoring a computer system,  
comprising:

reading restore information, the restore information  
including saved hard disk configuration information, registry  
information, a catalog of unchangeable files and at least one  
instruction for launching at least one restore program; and

restoring the computer system by configuring at least  
part of the system based on the restore information, and by  
executing the at least one instruction.

35. The method of claim 34 wherein configuring at least  
part of the system includes scanning for actual hard disk  
information of the computer system and comparing the actual  
hard disk information to the saved hard disk configuration  
information.

36. The method of claim 34 wherein the saved hard disk  
configuration information includes partition and volume  
information, and wherein configuring at least part of the  
system based on the restore information includes reconfiguring  
at least one hard disk of the computer system to correspond to  
the partition and volume information.

37. The method of claim 34 wherein the hard disk configuration information includes information indicative of where key operating system files are located, and wherein configuring at least part of the system based on the restore information includes copying operating system files to a hard disk location based on the information.

38. The method of claim 34 wherein configuring at least part of the system based on the restore information includes creating a boot volume.

39. The method of claim 34 wherein configuring at least part of the system based on the restore information includes creating a system volume.

40. The method of claim 34 wherein configuring at least part of the system based on the restore information includes updating a registry.

41. The method of claim 34 wherein configuring at least part of the system based on the restore information includes installing a device driver.



42. The method of claim 34 wherein executing the at least one instruction includes launching a restore program.

43. A computer-readable medium having computer executable instructions for performing the method of claim 34.

44. A system for recovering from a failure of a computer device, comprising:

a medium;

a backup process for collecting restore information of a first system, the restore information including hard disk configuration information and at least one instruction for launching a restore program, the backup process writing the restore information to a medium in a defined format; and

a restore process for reading the state information from the medium, configuring a second system based on the state information, and launching the restore program.

45. The system of claim 44 further comprising a backup device, and wherein the backup process writes information for enabling the backup device to the medium.

46. The system of claim 45 wherein the information for enabling the backup device includes a device driver.

47. The system  
s at least some  
er medium via t

48. The system  
res at least so  
ther medium.

The system  
at least so  
medium.

DATE	DESCRIPTION	AMOUNT	DATE	DESCRIPTION	AMOUNT
1900	Jan 1		1901	Jan 1	
1900	Feb 1		1901	Feb 1	
1900	Mar 1		1901	Mar 1	
1900	Apr 1		1901	Apr 1	
1900	May 1		1901	May 1	
1900	Jun 1		1901	Jun 1	
1900	Jul 1		1901	Jul 1	
1900	Aug 1		1901	Aug 1	
1900	Sep 1		1901	Sep 1	
1900	Oct 1		1901	Oct 1	
1900	Nov 1		1901	Nov 1	
1900	Dec 1		1901	Dec 1	